

AMENDMENTS TO THE CLAIMS:

Claim 1. (Currently Amended) A method for manufacturing a group III nitride compound semiconductor device, comprising ~~a step of:~~
forming a resist layer on a group III nitride compound semiconductor layer;
patterning said resist layer; and
irradiating a surface of said a wafer with ultraviolet rays to thereby clean said surface of said wafer,
wherein said irradiating said surface of said wafer is performed after said patterning said resist layer.

Claim 2. (Original) A method for manufacturing a group III nitride compound semiconductor device according to claim 1, wherein said ultraviolet rays have a central wavelength of 172 nm.

Claim 3. (Original) A method for manufacturing a group III nitride compound semiconductor device according to claim 1, wherein said ultraviolet rays are emitted from an excimer lamp.

Claim 4. (Currently Amended) A method for manufacturing a group III nitride compound semiconductor device according to claim 1, wherein said group III nitride compound semiconductor layer comprises ~~cleaning step is carried out on~~ a p-type semiconductor layer.

Claim 5. (Currently Amended) A method for cleaning a group III nitride compound semiconductor device ~~having an electrode on a p-type group III nitride compound semiconductor layer~~, comprising:
forming an electrode on a p-type group III nitride compound semiconductor layer, said
forming said electrode comprising:
forming a resist layer on said group III nitride compound semiconductor layer;
patterning said resist layer; and

irradiating said group III nitride compound semiconductor device with ultraviolet rays, ~~before and/or after said electrode are formed~~

wherein said irradiating said surface of said wafer is performed after said patterning said resist layer.

Claim 6. (Original) A cleaning method according to claim 5, wherein said ultraviolet rays have a central wavelength of 172 nm.

Claim 7. (Original) A cleaning method according to claim 5, wherein said ultraviolet rays are emitted from an excimer lamp.

Claim 8. (Currently Amended) A method for cleaning a group III nitride compound semiconductor device ~~cut out of a wafer~~, comprising a step of:

cutting a wafer comprising a group III nitride compound semiconductor layer to form a plurality of wafer chips; and

after said cutting said wafer, irradiating a surface of said plurality of wafer chips ~~said group III nitride compound semiconductor device~~ with ultraviolet rays to thereby clean said surface of said plurality of wafer chips ~~group III nitride compound semiconductor device~~.

Claim 9. (Original) A cleaning method according to claim 8, wherein said ultraviolet rays have a central wavelength of 172 nm.

Claim 10. (Original) A cleaning method according to claim 8, wherein said ultraviolet rays are emitted from an excimer lamp.

Claim 11. (New) The method according to claim 1, further comprising:

removing said resist layer,

wherein said irradiating said surface of said wafer is performed after said removing said resist layer.

Claim 12. (New) The method according to claim 1, wherein said patterning said resist layer forms at least one window in said resist layer.

Claim 13. (New) The method according to claim 12, wherein said irradiating said surface of said wafer is performed through said at least one window in said resist layer.

Claim 14. (New) The method according to claim 1, further comprising:
repeating said irradiating said surface of said wafer at least one time.

Claim 15. (New) The method according to claim 5, wherein said group III nitride compound semiconductor device comprises a light-emitting diode.

Claim 16. (New) The method according to claim 1, further comprising:
depositing a material for forming an electrode on said group III nitride compound semiconductor layer;
wherein said irradiating said surface of said wafer is performed at least one of before said depositing said material and after said depositing said material.

Claim 17. (New) The method according to claim 1, wherein said irradiating said surface of said wafer comprises irradiating said surface of said wafer using a low-pressure mercury lamp, said ultraviolet rays comprising wavelengths of 185 nm and 254 nm.

Claim 18. (New) The method according to claim 1, wherein said ultraviolet rays comprise a central wavelength of 172 nm, a half bandwidth of 14 nm, and an irradiance of 10 mW/cm², and
wherein said irradiating said surface of said wafer employs an irradiation distance of 2 mm, and an irradiation time of 2 minutes.

Claim 19. (New) The method according to claim 1, wherein said irradiating said surface of said wafer ashes an organic resist residue on said surface.

Claim 20. (New) The method according to claim 1, wherein said irradiating said surface of said wafer causes an organic resist residue on said surface to react with oxygen to generate CO and CO₂.